#### THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

(08/294,730)	Paper	No.	31
	Paper	No.	31
(90/003,655)	Paper	No.	31
(90/003,826)	Paper	No.	31
(90/004,552)			

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS

AND INTERFERENCES

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Appeal No. 98-3125 Application No.  $08/294,730^{1}$  and

Reexamination Nos.  $(90/003,655, 90/003,826, and 90/004,552)^2$ 

 $<sup>^{\</sup>rm 1}$  Application filed August 23, 1994 for reissue of U.S. Patent No. 5,044,412, issued September 3, 1991, based on Application 07/278,778, filed December 2, 1988.

 $<sup>^2</sup>$  Requests filed December 7, 1994 (Control No. 90/003,655), May 8, 1995 (Control No. 90/003,826) and February 12, 1997 (Control No. 90/004,552) for the Reexamination of Patent

No. 5,044,412, issued September 3, 1991, based on Application 07/278,778, filed December 2, 1988.

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ON BRIEF

Before MEISTER, FRANKFORT, and NASE, <u>Administrative Patent</u> <u>Judges</u>.

FRANKFORT, Administrative Patent Judge.

### DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 3, 5, 6, 9 through 18 and 20 in this application for the reissue of U.S. Patent No. 5,044,412. Claims 21 and 22 stand allowed. Claims 4, 7, 8 and 19, the only other claims remaining in the application, have been indicated by the examiner to contain allowable subject matter, but currently stand as objected to until they are rewritten in independent form. Claims 23 through 28 have been canceled. As further background, we note that U.S. Patent No. 5,044,412 is also the subject of three Reexamination proceedings, which proceedings have been merged with the present reissue application (see Paper Nos. 20 and 21, both mailed April 15, 1997). Those Reexamination proceedings are identified by Control numbers 90/003,655 (filed December 7, 1994), 90/003,826 (filed May 8, 1995) and 90/004,552 (filed February 12, 1997). This decision jointly applies to the present reissue application and the three Reexamination proceedings and will be physically entered into all four of the abovenoted files.

Appellants' invention is directed to an apparatus for debarking logs, and more particularly to a rotary drum debarker which rotates groups of tree length logs so that they rub against

each other to remove bark from the logs without appreciable wear to the rotary drum. As noted in column 2, lines 3-22, of the '412 patent,

[i]t has been proposed to feed tree length logs into a debarking drum with a nealy horizontal conveyor. To obtain efficient debarking, the tree length logs must be fed in groups of stacked or side by side logs. problem with this technique is that the very long logs, perhaps sixty feet in length, begin to rotate and tumble soon after their leading ends enter the drum, while substantial lengths of the logs are still on the conveyor. rotating and flailing motion of the logs can cause severe damage to the conveyor chain, and the trailing ends of logs leaving the conveyor can catch on and can be grabbed by the downwardly and rearwardly moving return portion of the conveyor. This can cause the trailing end of a log to be pushed down and pulled rearwardly so that the log jams in the chain while its leading end is whipped around by the While the conveyor chain is quite strong and can support and move groups of heavy logs, localized stress in individual links caused by impact, or by grabbing a log at the nose end of the conveyor can damage the chain.

Appellants' solution to the problem indicated above is to provide a debarking apparatus which uses a generally conventional main chain conveyor and an auxiliary feed means in the form of a conveyor or low friction feed region between the nose or head end of the main chain conveyor and the

debarking drum inlet, to avoid damage to the main conveyor chain, while continuously feeding stacks or groups of logs into the continuously rotating debarking drum. As explained in column 2, lines 45-50, of the '412 patent,

[t]he purpose of the auxiliary feed means or low friction region is to shield the head end of the main conveyor and to provide a region between the main conveyor and the drum inlet where there is minimal binding or jamming of trailing ends of logs being rotated by the drum.

As further noted in column 2, lines 51-59,

[i]n accordance with one aspect of the invention, the auxiliary feed means is a very rugged auxiliary conveyor located between the head end of the chain conveyor and the inlet of the debarking drum. In a preferred embodiment, this auxiliary conveyor is a feed roller driven independently of the conveyor chain, so that it can be driven at any desired surface speed i.e. the same as or faster or slower than the surface speed of the conveyor chain.

The preferred embodiment of appellants' invention is best seen in Figures 1 through 5 of the patent drawings.

Claims 1, 2, 6, 10 and 16 are representative of the subject matter on appeal and a copy of those claims, as

reproduced from the Appendix to appellants' brief, is attached to this decision.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Wehr et al. (Wehr)	3,457,975	July	29,
1969			
Hill	4,362,195		Dec.
7, 1982			
Svensson	4,374,533	Feb.	22,
1983			
Sepling	4,774,987	Oct.	4,
1988			

Claims 1 through 3, 5, 6, 9 through 14, 16 through 18 and 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Sepling in view of Hill or Wehr.

Claim 15 stands rejected under 35 U.S.C. § 103 as being unpatentable over Sepling in view of Hill or Wehr as applied above, and further in view of Svensson.

Rather than reiterate the examiner's full statement of the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellants regarding those rejections, we make reference to the Office action mailed

April 29, 1996 (Paper No. 10), the final rejection mailed November 17, 1997 (Paper No. 25) and to the examiner's answer mailed June 9, 1998 (Paper No. 28) for the examiner's complete reasoning in support of the rejections, and to appellants' brief (Paper No. 27, filed March 20, 1998) and reply brief (Paper No. 29, filed July 24, 1998) for appellants' arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art references, and to the respective positions

articulated by appellants and the examiner. As a consequence of

our review, we have made the determinations which follow.

Looking first to the examiner's rejection of appellants' independent claims 1, 6 and 16 under § 103 based on Sepling and Hill or Wehr, we note that the examiner's position is that Sepling shows a debarking apparatus substantially as claimed including: a rotary debarking drum (5), chain conveyor means (4) for conveying groups of logs to the debarking drum, and drive means for continuously driving the conveyor. What the examiner finds lacking in Sepling with regard to the claimed subject matter is that "Sepling does not show the inclusion of auxiliary feed means (comprising low friction rollers)" (Paper No. 10, page 4). To provide for this perceived difference between Sepling and the claimed subject matter, the examiner observes that both Hill (roller 66) and Wehr (roller 11) "clearly teach the desirability of providing secondary/auxiliary feed means, in the form of a roller read as being low friction operating in conjunction with primary feed means, in combination with a debarking unit" (Paper No.

10, page 4). From these teachings, the examiner concludes that for purposes of providing a more controllable feed of logs to a debarking unit, and for purposes of ensuring front and rear end log feed, one having the ordinary level of skill in the art would have found it obvious to include in the device of Sepling, auxiliary feed means, as taught by Hill and Wehr.

After reviewing the collective teachings of Sepling and Hill, and Sepling and Wehr, we, like appellants, are of the view that the examiner has engaged in impermissible hindsight reconstruction in attempting to modify the rotary drum debarker and feed mechanism of Sepling in light of the distinctly different log transporting and debarking apparatus of either Hill or Wehr. In contrast to the rotary drum debarker of Sepling wherein groups of logs are fed into the rotary debarker (5), with movement of the trailing ends of the logs accommodated within the fixed feed cylinder (3), which allows rotation of the "tail ends" of the logs that project from the drum into the feed cylinder without causing binding or snapping off (col. 3, lines

4-8), Hill and Wehr each disclose a debarking apparatus for a single log and a roller system which both grips and guides the single log into the knife-type debarking unit (54) of Hill and the chain saw debarker (2) of Wehr. Neither Hill nor Wehr recognizes the problems associated with feeding groups of logs into a rotary debarking drum like that set forth in the claims on appeal and in Sepling. Moreover, it is clear to us that the

gripping and guiding roller systems of Hill and Wehr would be incapable of use in the type of rotary debarking drum employed in Sepling, since they would prevent the disclosed rotation of the "tail ends" of the logs that project from the rotary drum into the feed cylinder (3) of Sepling.

While we cannot support the examiner's combination of Sepling and Hill or Sepling and Wehr, we nonetheless will sustain the examiner's rejection of claims 1 and 6 under 35 U.S.C. § 103. In reaching this conclusion we have carefully reviewed the complete disclosure of the Sepling patent, and find that the subject matter set forth in claims 1 and 6 on appeal lacks novelty with regard to the debarking apparatus described in Sepling. We refer specifically to the express teaching found at column 4, lines 39-46, of Sepling, wherein it is indicated that the chain feeder or conveyor (4) seen in Figures 1 and 2 of the patent may be provided as separate feeders/conveyors for the loading section (2) and the feed cylinder (3). In this arrangement, the debarking apparatus of Sepling would comprise (in the language of claim 1 on appeal): a generally horizontal rotary drum debarker (5); power means

(not shown) for continuously rotating the drum of the
debarker; a generally

horizontal main conveyor means associated with the loading section (2) for conveying groups of logs toward the drum, with said main conveyor means having a discharge end below the axis of rotation of the drum; drive means (not shown) for continuously driving the main conveyor means; and "auxiliary feed means" below the axis of rotation of the drum in the form of a separate driven chain conveyor associated with the feed cylinder (3) and located between the discharge end of the main conveyor means and the inlet end of the debarker drum for assisting the movement of groups of logs fed by the main conveyor means into said inlet end of the drum. Given this teaching in Sepling, we find the examiner's use of the Hill and Wehr patents to be mere surplusage and sustain the § 103 rejection of claim 1 on the basis of Sepling alone. As has been made clear by our reviewing Courts on numerous occasions, anticipation or lack of novelty is the ultimate or epitome of obviousness. See, in this regard, In re Fracalossi, 681 F.2d 792, 794, 215 USPO 569, 571 (CCPA 1982); In re Pearson, 494 F.2d 1399, 1403, 181 USPQ 641, 644 (CCPA 1974).

In understanding the language "auxiliary feed means" in claim 1 on appeal, we have looked to appellants' specification and note that they have indicated on several occasions (e.g., col. 2, lines 51-54, and col. 3, lines 28-30) that such feed means may be "an auxiliary conveyor" or, more specifically, "a very rugged auxiliary conveyor located between the head end of the chain [main] conveyor and the inlet of the debarking drum." In our opinion, this is exactly what is described with respect to the embodiment of the debarking apparatus noted in Sepling above, wherein there is a main chain conveyor associated with the loading section (2) and a separate "auxiliary" chain conveyor associated with the feed cylinder (3).

Dependent claim 2 recites that the "auxiliary feed means has a low friction region" and provides that said low friction region "has a length in the feed direction which is less than the diameter of the debarking drum." No such "low friction region" is found in Sepling. Claim 3 depends from claim 2 and further defines the "low friction region," while claim 5

depends from independent claim 1 and also makes reference to "said low friction region." Since Sepling has no "low friction region" as set forth in claims 2 and 3 on appeal, and no main conveyor with the added structure defined in claim 5 on appeal, we will not sustain the examiner's rejection of these claims.

Independent claim 6 on appeal defines an apparatus for debarking tree length logs comprising: a generally horizontal rotary drum debarker; power means for continuously rotating the drum of the debarker; a generally horizontal chain conveyor means having a conveying surface below the axis of rotation of the drum for conveying groups of tree length logs toward the drum, with said chain conveyor means having a chain return headspool at its discharge end; drive means for continuously driving the chain conveyor means; and "a

<sup>&</sup>lt;sup>3</sup> We note that there is no proper antecedent basis in claim 1 for "said low friction region" as set forth in dependent claim 5 on appeal, and that we have accordingly added, pursuant to the provisions of 37 CFR § 1.196(b), a new ground of rejection, <u>infra</u>, under 35 U.S.C. § 112, second paragraph.

horizontal roller below the axis of rotation of the drum and between the discharge end of said chain conveyor means and the inlet end of said debarking drum, and drive means for rotating said roller." Again we are of the view that the claimed structure finds correspondence in Sepling alone. Both the main chain conveyor associated with the loading section (2) of Sepling and the "auxiliary" chain conveyor associated with the feed cylinder (3) therein will be supported by rollers, similar to those seen in Figure 1, and at least one of those rollers for each feed conveyor will be driven. Thus, it is clear that the "auxiliary" conveyor in Sepling associated with the feed

cylinder (3) will include "a horizonal roller" positioned as claimed by appellants, and drive means for said roller.

Accordingly, since claim 6 is readable on Sepling alone, we will sustain the examiner's rejection of claim 6 under 35 U.S.C.

§ 103, noting again that anticipation or lack of novelty is the ultimate or epitome of obviousness.

With regard to dependent claim 9, we note that the spacing requirement of this claim is not met by Sepling. As for dependent claims 10 and 11, we note that Sepling has no roller "having a smooth exterior surface" (claim 10), or a roller constructed as specifically defined in claim 11 on appeal. Nor does Sepling have a main chain conveyor means having the particular construction set forth in claim 12 on appeal and the claims which depend therefrom. Thus, the examiner's rejection of claims 9 through 14 and the rejection of claim 15 on appeal will not be sustained.

Independent claim 16 on appeal defines an apparatus for debarking logs wherein said apparatus is identical to that set forth in independent claim 1 on appeal, with the addition that the main conveyor means is specifically defined as being "a link

chain conveyor having a chain return headspool at its discharge end, " and the auxiliary feed means is further defined as comprising "means defining a low friction region of short length in the feed direction of logs and close to said headspool for preventing trailing ends of logs from catching in the return portion of the chain." A review of appellants' specification reveals that the "low friction region" has low friction relative to the main chain conveyor, provides a region between the main conveyor and the drum inlet where there is "minimal binding or jamming of trailing ends of logs being rotated by the drum" (col. 2, lines 48-50), and also, in the preferred embodiment, "permits logs pressed against the roller to rotate, so the logs have less tendency to climb across the roller and jam against other logs" (col. 6, lines 39-43). As for the "short length" recitation regarding the low friction region, we note that the specification (col. 3, lines 45-49) indicates that the low friction region "occupies only a short longitudinal region between the main conveyor and the inlet of the drum," while col. 6, lines 16-25, indicates that the spacing for the roller or low friction region

is "substantially less than either the width of the conveyor . . . or the diameter of the drum 24" and that such spacing is on the order of only about 3 feet.

Given that the "auxiliary" conveyor in Sepling associated with the feed cylinder (3) is also a link chain conveyor like the main conveyor therein, we must conclude that the "auxiliary" conveyor of Sepling would not constitute a "low friction region" like that required in the claims on appeal, since it would have generally the same level of friction as the main chain conveyor, not less. Moreover, the length of the "auxiliary" conveyor in Sepling cannot be considered to be of "short length," as that term is understood in light of appellants' disclosure, since, as can be clearly seen in Figures 1 and 2 of Sepling, the "auxiliary" conveyor associated with the feed cylinder (3) would have a length that is substantially greater than 3 feet, greater than the width of the main conveyor of loading section (2) and greater than the diameter of the debarking drum 5. Thus, we must conclude that the subject matter of claim 16 on appeal is different

than that seen or disclosed in Sepling and not obvious therefrom. Accordingly, the rejection of claim 16, and the claims which depend therefrom, under 35 U.S.C. § 103 will not be sustained.

Under the provisions of 37 CFR § 1.196(b), we enter the following new ground of rejection against claim 5 on appeal.

Claim 5 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. As noted in footnote 2 above, there is no proper antecedent basis in claim 5, or in claim 1, from which claim 5 depends, for "said low friction region" set forth in line 5 of claim 5.

Since our reasons for affirming the rejection of claims 1 and 6 on appeal under 35 U.S.C. § 103 are substantially different than those put forth by the examiner, we also designate our affirmance of claims 1 and 6 as a new ground of rejection.

For the reasons advanced by the examiner on page 5 of the answer, we share the view that the decisions in both Recreative Technologies Corp. and Portola Packaging, Inc. are inapposite to this case for the reissue of U.S. Patent No. 5,044,412. In addition, we would distinguish the present fact situation from that of both of the above decisions, since no final Agency action by the Patent and Trademark Office (i.e., issuance of the reissue patent or a Reexamination Certificate) had taken place in this application at the time the examiner reconsidered the prior art involved and changed his mind concerning the allowability of claims 1 through 3, 5, 6, 9 through 18 and 20.

To summarize our decision, we have affirmed the examiner's rejection of claims 1 and 6 under 35 U.S.C. § 103, but reversed the examiner's rejection of claims 2, 3, 5, 9 through 18 and 20 under 35 U.S.C. § 103. In addition, pursuant to 37 CFR

§ 1.196(b), we have entered a new ground of rejection against claim 5 on appeal under 35 U.S.C. § 112, second paragraph, and

designated our affirmance of the rejection of claims 1 and 6 as a new ground of rejection.

It follows from the foregoing that the decision of the examiner is affirmed-in-part.

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)).

§ 1.196(b) provides that "[a] new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellant,

WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise
one of the following two options with respect to the new
ground of rejection to avoid termination of proceedings (37

CFR § 1.197 (c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts

relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR  $\S 1.136(a)$ .

## AFFIRMED-IN-PART, 37 CFR § 1.196(b)

JAMES M. MEISTER Administrative Patent	Judge	) ) )
CHARLES E. FRANKFORT Administrative Patent	Judge	) ) ) BOARD OF PATENT ) APPEALS ) AND ) INTERFERENCES )
JEFFREY V. NASE Administrative Patent	Judge	) ) )

CEF/sld

Mark Rogers Wright, Lindsey and Jennings 200 West Capitol Avenue, Suite 2200 Little Rock, AR 72201

Morton J. Rosenberg Rosenberg, Klein & Bilker 3444 Ellicott Center Dr., Suite. 105 Ellicott, MD 21043

Ray F. Cox Wright, Lindsey & Jennings 200 West Catpitol Avenue, Suite 2200 Little Rock, AR 72201

Michelle N. Lester Cushman, Darby & Cushman 1100 New York Ave., N.W. 9th Floor, East Tower Washington, D.C. 20005-3918

## <u>Appendix</u>

1. Apparatus for debarking logs comprising,

a generally horizontal rotary drum debarker having an inlet end,

power means for continuously rotating the drum of the debarker generally about a horizontal axis,

generally horizontal main conveyor means for conveying groups of tree length logs toward said drum, said main conveyor means having a discharge end below the axis of rotation of said drum,

drive means for continuously driving the main conveyor means, and

auxiliary feed means below the axis of rotation of the drum and between the discharge end of said main conveyor means and the inlet end of said drum for assisting the movement of groups of logs fed by said main conveyor means into said inlet end of the drum.

2. Apparatus according to claim 1 wherein <u>said auxiliary feed</u> means has a low friction region and wherein,

said low friction region is substantially at the elevation of the chain of said main conveyor, and has a length in the feed direction which is less than the diameter of the debarking drum.

6. Apparatus for debarking tree length logs comprising,

a generally horizontal rotary drum debarker having an inlet end,

power means for continuously rotating the drum of the debarker about a generally horizontal axis of rotation,

generally horizontal chain conveyor means having a conveying surface below the axis of rotation of the drum for conveying groups of tree length logs toward said drum, said [main] chain conveyor means having a chain return headspool at its discharge end,

drive means for continuously driving [the] <u>said</u> chain conveyor means,

a horizontal roller below the axis of rotation of the drum and between the discharge end of said [main] <a href="main">chain</a> conveyor means and the inlet end of said debarking drum, and

drive means for rotating said roller.

- 10. Apparatus according to claim 6 wherein said roller comprises a roller having a smooth exterior surface.
- 16. Apparatus for debarking logs comprising,

a generally horizontal rotary drum debarker having an inlet end,

power means for continuously rotating the drum of the debarker,

generally horizontal main conveyor means for conveying groups of tree length logs toward said drum, said main conveyor means having a discharge end,

drive means for continuously driving the main conveyor means, and

auxiliary feed means between the discharge end of said main conveyor means and the inlet end of said drum for assisting the movement of groups of logs fed by said main conveyor means into said inlet end of the drum, and wherein,

said main conveyor means comprises a link chain conveyor having a chain return headspool at its discharge end, and

said auxiliary feed means comprising means defining a low friction region of short length in the feed direction of logs and close to said headspool for preventing trailing ends of logs from catching in the return portion of the chain.

# **Shereece**

Appeal No. 98-3125 Application No. 08/294,730

**APJ FRANKFORT** 

**APJ NASE** 

**APJ MEISTER** 

AFFIRMED-IN-PART

Prepared: September 9, 1999